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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,084	01/16/2002	Nobushige Arai	2936-0146P	6094

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EXAMINER

STINSON, FRANKIE L

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,084

Applicant(s)

ARAI ET AL.

Examiner

FRANKIE L. STINSON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 87-173 is/are pending in the application.
- 4a) Of the above claim(s) 87-123 and 173 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 152-168 is/are allowed.
- 6) ☒ Claim(s) 124, 126-136 and 141-151 is/are rejected.
- 7) ☒ Claim(s) 125 and 137-140 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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- i) Restriction is required under 35 U.S.C. 121 and 372.
2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 87-90, drawn to an agent.

Group II, claim(s) 91-123, drawn to a water purifier.

Group III, claim(s) 124-172, drawn to a washing machine.

Group IV, claim(s) 173, drawn to a method.

3. The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The agent of Group I lacks the same or corresponding technical features of the structure of the purifier of Group II and the washing machine of Group III, and the method step of adding an acid as in Group IV.

4. During a telephone conversation with Mr. Robert Goozner Reg. No. 42,593 on 9-5-03 a provisional election was made with traverse to prosecute the invention of Group III, claims 124-172. Affirmation of this election must be made by applicant in replying to this Office action. Claims 87-90, 91-123, and 173 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Claims 126-135, 141, 145-151 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 126, line 7, the phrase "the separator" is without proper antecedent basis. This is also applicable to the same in claim 134, line 7. Re claim 141, lines 2-3, the phrases "the space", and "the outer tub" are all without proper antecedent basis. Re claim 145, line 5, the phrase "the drained washing water" is without proper antecedent basis. This is also applicable to the same in claim 150, line 5. Although the examiner has reviewed all elected claims for compliance with 35 USC 112, it requested that the applicant also review and revised the claims (if needed) to comply with 35 USC 112.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 124, 136, 141-144 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Grandprey et al. or Goebel et al. in view of Japan 2001-104997 (Japan'997).

Re claims 124 and 136, Grandprey and Goebel (see Grandprey, col. 3, lines 58 thru col. 4, lines 1-8 and col. 5, lines 48-58 and see in Goebel, col.2, lines 55-67, col. 3, lines 66 thru col. 5, line 11) are cited disclosing a washing machine incorporating a purifier for collecting pollutants present in polluted water by flocculating the polluted water with a flocculant, a separator for separating the flocks and returning the washing water that

differs from the claim only in then recitation of the aspirator for sucking in the flocculant and air to mix the flocculant and air with the polluted water. Japan'997 is cited disclosing in a device for treating polluted water (see fig. 1) where there is provided an aspirator (3, 5) for sucking flocculant and air to mix the flocculant and air with polluted water. It therefore would have been obvious to one having ordinary skill in the art to modify the device of either Grandprey or Goebel, to include an aspirator as taught by Japan'997, for the purpose of thoroughly combining the flocculant with polluted water for maximum separation of the pollutant form the wash water. Re claim 141, it is deemed inherent in washing machines that the water in the space between the washing tub (typically a basket) and outer tub is agitated by the relative movement of the inner tub/basket and outer tub. Re claim 142, no patentable distinction is deemed to exist between the returning washing water to the center of the tub as claimed and the returning of the washing water as taught by Goebel (see MPEP 2144.04 section VI-C "REVERSAL, DUPLICATION OR REARRANGEMENT OF PARTS"). Re claim 143, Goebel discloses the typical tap water rinse. Re claim 144, Goebel and Grandprey disclose the flocculating pollutants and the collection of the same.

8. Claims 169-172 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Grandprey et al. or Goebel et al. in view of either Lahti or Cole.

Re claim 169, Grandprey and Goebel are cited disclosing a washing machine incorporating a polluted water purifier for collecting pollutants by flocculating the pollutant with a flocculant that differs from the claim only in the recitation of a pH value controller adding an acid. Cole and Lahti are both cited disclosing in a flocculant purifier

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arrangement, where there is provided a pH controller (see Cole, col. 5, lines 29-59 and Lahti, col. 2, lines 28-44) for controlling the pH of the polluted water by adding an acid. It therefore would have been obvious to one having ordinary skill in the art to modify the device of either Grandprey or Goebel, to include a pH controller as taught by either Cole or Lahti, for the purpose increasing the floc density or size (as is common in the art) or for removing active human involvement in controlling the pH (see Grandprey col. 4, line 59-62). Re claims 170 and 171, no patentable distinction is deemed to exist between the pollutant being flocculated, namely an anionic surfactant or the flocculant employed, namely a cationic inorganic flocculant, and the corresponding features in either Goebel or Grandprey (see MPEP 2144.06, "SUBSTITUTING EQUIVALENTS KNOWN FOR THE SAME PURPOSE"). Re claim 171, Lahti discloses the pH (see col. 6, line 13).

9. Claims 126-135 and 145-151 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

10. Claims 2 and 137-140 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 152-168 are allowed.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In UK'446, Carpenter et al., Deane, Stewart et al., Keoteklian, Japan'592, Japan'198, Germany'275, Sebelik et al., Dobrez et al., Arnaud, Klein et al., Germany'747 and van Giles et al., note the flocculant.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (703) 308-0661. The examiner can normally be reached during the first week of the pay-period M-F from 5:30 a.m. to 3:00 p.m. and during the second week of the pay-period from Tu-Th second from 5:30 a.m. to 3:00 p.m. and on Fri. from 5:30 a.m. to 2:00 p.m. Alternating Mondays off.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (NON-FINAL REJECTION STATUS) and (703) 872-9311 (AFTER-FINAL REJECTION STATUS).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Any inquiry for missing parts of this Office Action (copies of references, pages, forms etc.), contact Office Manager Ms. Sandra Sewell (703) 308-0661.

13. ATTENTION:

As a result of the move of the USPTO Group Art Unit 1746 into its new campus on December 17, 2003, the examiner's new telephone number will be (571) 272-1308 and the fax number will be (571) 273-1308.

fls

FRANKIE L. STINSON
Primary Examiner
Art Unit 1746